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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,730	03/19/2004	Brian Farrell	FM-208J	8270

7590 08/09/2005

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EXAMINER

NERBUN, PETER P

ART UNIT	PAPER NUMBER
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3765

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No.		Applicant(s)	
	10/804,730		FARRELL ET AL.	
	Examiner		Art Unit	
	Peter P. Nerbun		3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
 4a) Of the above claim(s) 7,8,15-23 and 25 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-3,6,9-14,24 and 26 is/are rejected.
 7) ☒ Claim(s) 4 and 5 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,6,9,11-14, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al (U.S.P. 6,420,008) in view of Akram (U.S.P. 6,785,144). The patent to Lewis et al discloses an electrically active textile article comprising fabric (see col. 3, lines 55-58), a circuit 46, Fig. 2 on a flexible substrate 14, Fig. 1 secured to the fabric (see col. 3, lines 21-24 and lines 55-58 and col. 4, lines 38-39), and at least one electronic component (e.g. the electronic components that are connected to form the Binary Counter shown in Fig. 2) populating the circuit. The flexible substrate 14, Fig. 1 is a printed circuit board. It would have been obvious to construct the circuit with traces and pads as suggested by Akram (see col. 4, lines 51-62) since these traces and pads are commonly used in printed circuit boards to interconnect various electronic components. With regard to claim 9, note protective covering 12.

Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al in view of Akram as applied to claims 1-3,6,9,11-14, and 26 above, and further in view of Bennion (U.S.P. 4,774,434). To construct the protective

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covering of Lewis et al from a waterproof material as suggested by Bennion (at col. 1, lines 61-64) would have been obvious since the circuit would be protected from malfunctioning in a wet environment.

Claims 7,8,15-23, and 25 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

Applicant's arguments filed May 23, 2005 have been fully considered but they are not persuasive. Applicant states that "Lewis teaches away from having various electronic components on the circuit board". This is incorrect since integrated circuit 46 of Lewis is wire bonded onto the circuit board (see col. 4, lines 38-39 of the Lewis specification). As seen in Lewis' drawings in Fig. 2 integrated circuit 46 contains numerous electronic components such as the electronic components that constitute the Binary Counter (binary counters are composed on numerous bistable multivibrators each consisting of a series of transistors). Therefore the electronic components in Lewis' integrated circuit are on the circuit board 14, Fig. 1. Applicant further states that Lewis states the front surface of the circuit board is flat and free of components except for an LED. While the front surface of Lewis' circuit board is free of components except for an LED the rear surface of Lewis' circuit board is supplied with an integrated circuit 46, Fig. 2 that contains many electronic components as described above. Applicant's claim 1 merely states that a circuit is "on a substrate". There is no mention of which side of the substrate the circuit is located. Note further col. 5, lines 2-4 where Lewis states that the printed indicia may be on the same surface

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as the printed circuit board instead of the opposite surface as described in the aforementioned embodiment. Finally applicant states that Lewis does not provide any motivation, teaching or suggestion to include traces and pads on the substrate. As a practical matter one having ordinary skill in the art would recognize that Lewis' integrated circuit 64 has traces and pads since it is well known in that art that integrated circuits have traces which connect the individual components of the integrated circuit and pads on which the components are electrically connected within the circuit. Further the motivation for securing the integrated circuit 46 to the substrate 14 with traces and pads is that integrated circuits are commonly manufactured onto printed circuit boards by machines which require these pads and traces to permit assembly of the circuit without human intervention. Thus the traces and pads on the substrate would be desirable to enable these machines to assemble the integrated circuit onto the printed circuit board in an economical manner.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

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the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter P. Nerbun whose telephone number is 571-272-4992. The examiner can normally be reached on M-Th (1st Week) M-F (2d Week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John J. Calvert can be reached on 571-272-4983. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Nerbun
August 4, 2005

A handwritten signature in black ink that reads "Peter Nerbun". The signature is fluid and cursive, with the first name "Peter" and last name "Nerbun" clearly distinguishable.

Peter Nerbun
Primary Examiner